SECTION D DETERMINATION
CATEGORICAL EXCLUSION (CX) DETERMINATION - RFO/CX 000-91

Proposed Action: IAG Site Characterization Activities in Floodplains/Wetlands for OUs 1, 2, 5 and 6 and the Geologic Characterization Program

Location: Rocky Flats Plant north of Golden, CO

Proposed by: U.S. Department of Energy Rocky Flats Office (RFO)

NOTE: Some of the work described below is part of the OU 1 RFI/RI field work under the Interagency Agreement. The OU 1 field work is scheduled in the IAG to be completed by December 18,1991. The CX needs to be approved in time to permit meeting that schedule.

Description of the proposed action:

NOTE: The activities described here are a sub-set of those included in EC 59-91, IAG Site Characterization Activities, reviewed by NCC on May 22, 1991. At that time, NCC recommended a CX for all the activities included in that project. In reviewing the proposed CX, however, DOE HQ determined (in RFO/CX-017-91, copy attached) that the CX would only apply to site characterization activities outside floodplains/wetlands. HQ directed that another CX be prepared for the work within floodplains/wetlands, describing what effects, if any, such work would have on the floodplain/wetlands so it could be determined if a CX was also applicable to the floodplain/wetland work. The present documents include a new EC and a second, proposed CX for the floodplain/wetland work.

The Department of Energy proposes to carry out site characterization activities, some of which will be within floodplains/wetlands, at its Rocky Flats Plant (RFP) north of Golden, CO. The activities will occur in operable units 1 (881 Hillside), 2 (903 Area), 5 (Woman Creek) and 6 (Walnut Creek) located south and east of the developed area of RFP. Geologic Characterization Program activities will take place in OU 6. The site characterization activities that will be in floodplains and/or wetlands consist of 1) locating new surface water and sediment sampling stations, 2) establishing soil sample sites, 3) drilling new wells and boreholes and 4) collecting surface water, groundwater, sediment, soil and soil gas samples. Approximate locations of these activities are shown in the accompanying figures. Each of these activities is discussed below.

Locating new surface water and sediment sampling stations consists of driving a stake in the ground to mark a spot which can be returned to for future sample collection. This activity will have no adverse impacts to floodplains or wetlands.

Establishing soil sample sites involves one of two procedures. One is to simply determine the point from which small (two-to-three tablespoons) surficial soil samples will be collected. Surficial soil sampling sites may be located anywhere there is soil. The second procedure is to identify the locations for soil sample pits by randomly selecting a point on a grid within the desired area. There could be a soil sample pit and one or more surficial samples sites located within each of the squares within the "estimated maximum extent" line shown in figure 2. Of those squares, or sample plots, numbers 38, 51, 52, 57, 81, 96, 109 and 115 include areas within a floodplain. Thus, soil samples from any or all of these sample plots could be taken from within a floodplain. Exact locations of soil sampling sites and pits within each square have not yet been fixed, although some of the accompanying figures show approximate proposed locations. Soil sample pits are typically nine feet long, five feet wide and four feet deep and are dug by a backhoe. These pits are typically dug and backfilled within a day. The pits may be located within a floodplain but are seldom

The action falls within the categorical exclusion for:

> "Site characterization and environmental monitoring, including siting, construction or operation of characterization and monitoring devices, under CERCLA and RCRA, if the activities would not . . . adversely affect environmentally sensitive areas . . ."

I have determined that the proposed action meets the requirements for the CX as defined in Section D of DOE NEPA Guidelines. Therefore, I approve the categorical exclusion of the proposed action from further NEPA review and documentation.

Date _____ Signature: _____

Title:

I have reviewed this action and my finding is that the CX is the appropriate level of NEPA Documentation.

Date _____ Signature: _____

Title:

EH-25 has reviewed this determination and has no objection.

Date: _____ Signature: _____

ADS # (E&WM only)
Funding: EM
authorization number:
NEPA Division reviewer: WAM

located in wetland areas because of the difficulty of digging in saturated soils. None of the proposed locations is in a wetland. Neither of the procedures will have an adverse impact to floodplains or wetlands.

Drilling new wells, boreholes and soil gas sampling holes involves driving a drilling rig to the designated site and drilling the hole, typically within a day. Wells and boreholes are characteristically four-to-six inches in diameter. As the drill bit advances, drill cuttings are brought to the surface and shoveled into 55-gallon drums for analysis of any contaminants, storage and ultimate disposal. When drilling is completed, surface evidence of the activity is downed vegetation at the site and a plastic or metal pipe sticking two-to-three feet above the ground.

Drilling in wetlands will be avoided where the drilling target permits because of, among other things, the special measures required when drilling in saturated soils and because drill rigs often become stuck if it is necessary to drive into a wetland. Because wetlands at RFP tend to be linear or very small, it will seldom, if ever, be necessary to drive drilling rigs into or across wetlands areas to reach, or work in, specific drilling sites. Typically, drilling targets are large enough that field decisions can be made to relocate drilling sites the small distance typically necessary to avoid wetlands. For instance, the soil gas sample sites, shown in figure 3 as being in the South Interceptor Ditch, will be relocated by field crews the five-to-10 feet necessary to move them out of the Ditch and its wetlands. It is possible, however, that a drilling target may require a hole be drilled in a wetland. If this occurs, the surface evidence of drilling will be similar to that in dryland areas: downed vegetation and a length of plastic or metal pipe sticking above the surface. In addition, depending on the degree of soil saturation or presence of standing water, there could be a small area of disturbed soil where the drill rig drove and around the drill site itself where personnel were working. This area is estimated to be on the order of 100- to 200-square feet at an individual wetland drill site. While the likelihood of drilling in wetlands is remote, it cannot be ruled out. Even if undertaken, drilling in a typical RFP wetlands is unlikely to cause any adverse impacts that would not be healed by the following growing season.

Approximate locations of proposed drilling sites within floodplains are shown in the accompanying figures and are highlighted by arrows. Determination of whether a site is within or outside a 100-year floodplain is based on a comparison of the figures to preliminary floodplain information from the U. S. Army Corps of Engineers. A total of 24 well or borehole sites is judged to be within, or probably within, a floodplain boundary, based on that comparison. The locations shown are approximate and many proposed drilling sites can and will be changed in the field by as much as 50 feet to accommodate field conditions and for other reasons. Thus, any indication that a given well will be within or outside a floodplain is tentative, as is any summary of the total number of wells that will be within or outside a floodplain. Based on the information in the preceding paragraphs, drilling of wells and boreholes is not expected to have any adverse impacts on floodplains or wetlands.

Collection of samples consists of driving or walking to a sampling location or well and collecting up to a few pounds of the desired medium. Sampling may be done on a weekly, monthly, quarterly or irregular basis. All existing and proposed surface water and sediment sampling stations are located in a floodplain and most are located in wetland areas. Collection of samples will have no adverse impacts on floodplains or wetlands.

Because of the nature of the sample station location, drilling and sample collection activities, no adverse impacts are expected to floodplains or wetlands from the site characterization activities.